

The background of the cover is a photograph of a pair of black, lace-up boots standing in shallow water. The water is a light blue color, and the boots are dark, creating a strong contrast. The boots are positioned in the center of the cover, with the right boot slightly ahead of the left one. The overall tone of the image is somewhat somber and mysterious.

NaSPA technical[®]

Supporting Enterprise Networks and Operating Environments

SUPPORT

MARCH 1996

VOLUME 4, NUMBER 3

IN TOO DEEP ?

**PERFORMANCE
AND TUNING
MIGHT BE THE ANSWER**

NaSPA's Home Page
<http://www.nascom.com/>

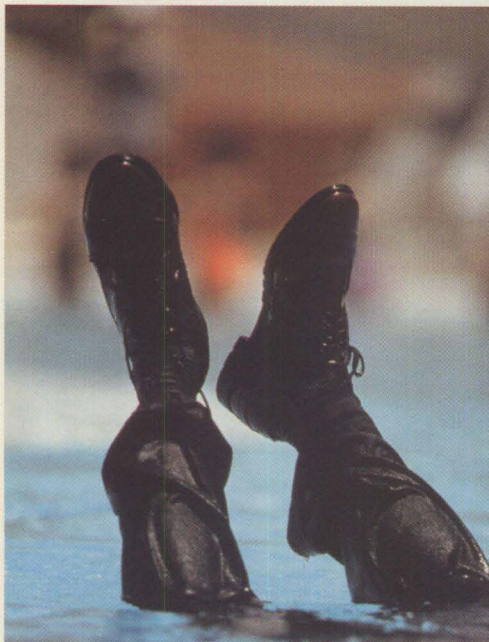


Photo: Terje Rakke, Image Bank, Chicago

NaSPA Mission Statement:

The mission of NaSPA, Inc., a not-for-profit organization, shall be to serve as the means to enhance the status and promote the advancement of all corporate computing technical professionals; nurture member's technical and managerial knowledge and skills; improve member's professional careers through the sharing and dispersing of technical information; promote the profession as a whole; further the understanding of the profession and foster understanding and respect for individuals within it; develop and improve educational standards; and assist in the continuing development of ethical standards for practitioners in the industry.

The information and articles in this magazine have not been subjected to any formal testing by NaSPA, Inc. or Technical Enterprises, Inc. The implementation, use and/or selection of software, hardware, or procedures presented within this publication and the results obtained from such selection or implementation, is the responsibility of the reader.

Articles and information will be presented as technically correct as possible, to the best knowledge of the author and editors. If the reader intends to make use of any of the information presented in this publication, please verify and test any and all procedures selected. Technical inaccuracies may arise from printing errors, new developments in the industry and/or changes or enhancements to components, either hardware or software.

The opinions expressed by the authors who contribute to **NaSPA Technical Support** are their own and do not necessarily reflect the official policy of NaSPA, Inc. Articles may be submitted by members of NaSPA, Inc. The articles should be within the scope of host-based, distributed platforms, network communications and data base, and should be a subject of interest to the members and based on the author's experience. Please call or write for more information. Upon publication, all letters, stories and articles become the property of NaSPA, Inc. and may be distributed to, and used by, all of its members.

NaSPA, Inc. is a not-for-profit, independent corporation and is not owned in whole or in part by any manufacturer of software or hardware. All corporate computing professionals are welcome to join NaSPA, Inc. Membership rates are \$29.95/year (USA), \$44.95/year (Canada) and \$54.95/year (all other countries). \$19.98 of your annual dues is allocated to the publication **NaSPA Technical Support** and is non-deductible therefrom.

NaSPA Technical Support (ISSN 1079-3135) (IPM Agreement Number 0806773) is published monthly by Technical Enterprises Inc., 7044 S. 13th Street, Oak Creek, WI 53154-1429. Second-class postage paid at Oak Creek, WI and additional mailing office. POSTMASTER: Send address changes to **NaSPA Technical Support**, 7044 S. 13th Street, Oak Creek, WI 53154-1429.

All product names mentioned in this publication are the trademarks/registered trademarks of their respective manufacturers.

FEATURES

9 How To Streamline Mainframe Application Performance

Applications Management is of major concern to all companies. This article defines a three-step method for helping ensure that applications perform reliably and effectively.

By Jim Sievers

19 Making Your Mainframe-PC Data Transfers Run Faster

This article discusses the speed that you can expect from mainframe-PC file transfer, the factors affecting speed, and what you can do to make your PC data transfers faster.

By Charles A. Mills

30 MVS Performance Tuning Tips

This article examines many common performance problems that face MVS sites, and provides tips and techniques for solving these problems.

By Neil Ervin

42 Analyzing RMF and CMF Goal Mode Reports

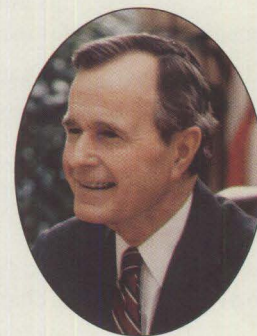
The new goal mode reports provide excellent new data to help you understand and monitor your data center more effectively.

By Cheryl Watson

NaSTEC '96

May 5 - 8, 1996
Orlando, Florida

*Celebrating our
10th Anniversary!*



Attend the best education conference of 1996!

Featuring keynote speaker, former President George Bush,
and leading educators in the IS industry.

For more information, call NaSPA at
(414) 768-8000, Ext. 109.

INTEROPERABILITY INSIGHTS



13 MQSeries Part III -- MQSeries Distributed Queue Management

This article will discuss some of the issues related to the design, installation, and operation of an MQSeries network.

By Tom Kruczek

23 LANRES Comes to VSE/ESA: Part II

LANRES/VSE offers several features to VSE customers, including the ability to administer networks, expand printing capacity by enabling host-to-LAN and LAN-to-host printing, and enlarge network disk configuration using disk service. With LANRES/VSE, data transfer between the mainframe and the network is simplified.

By Linda Dockstader

34 The Transition to the P/390: A User's Experience

This article highlights the experiences of one company that installed the IBM PC Server 500 System/390, and presents some guidelines for other sites contemplating this type of implementation.

By Mike Nelson

53 Establishing an Internet Presence: Part I -- Getting Out on the 'Net

This article, the first in a series, examines the steps and planning involved in getting an entire organization out on the 'net.

By Guy C. Yost

SYSTEM STRATEGIES



26 The 390 in Your Future: An Interview with IBM's Linda Sanford

With the development of CMOS, OpenEdition, and OS/390, the future is bright for applications, and client/server and network-centric work based on the 390 platform.

By John D. Kinne

48 Making the Transition to Parallel Sysplex at Boeing: Part III — Software Implications

This concluding article examines some of the software implications that must be considered when implementing Parallel Sysplex technology.

By Michael M. DuPas and Thomas Sible

56 VM and UNIX From a Systems Administration Perspective: Part II — The Changing Role of VM

This article examines how the changing needs of one computer center dictated its move from VM to UNIX as its primary computing platform.

By Daniel P. Martin

COLUMNS

61 MVS Tools & Tricks

Your Own World of Edit Macros
By Sam Golob

63 VSE Tools & Techniques

Restoring PRD1 and PRD2 Libraries and Extracting VSE and POWER Job Names
By Mark Hanna

64 VM Toolbox

Celebrating CMS Pipelines
By John D. Kinne

66 Storage Strategies

Operating Without an Operating System: Standalone Restore
By Steve Pryor

68 OS/2 Insights

Productivity Through OS/2
By Michael Norton

69 Enterprise Networking

How to Utilize the NetWare Mirroring Function
By John E. Johnston

70 NetWare News

NetWare Goes Mobile
By Guy C. Yost

74 Opening Windows

Save a Tree: Reducing the Bulk of Software Documentation
By Al Shing

75 On a Personal Note

Maintaining Balance in the Workplace
By Mike Sutton

76 Security Strategies

Internet Security Resources
By Eric Allred

DEPARTMENTS

6 From the President

8 Letters

40 Demos on Demand

56 BBS Buzz

77 Product Profiles

Productivity Through OS/2

MICHAEL NORTON

I recently purchased a home and, in the process of moving, dug one of my early computers out of storage, an IBM clone with 256 KB of memory, a CGA monitor and no hard drive. The only two areas remaining in my home without one generation of computer or another were the garage and the kitchen. So, remembering I had downloaded recipes from a BBS when the machine had been state-of-the-art (at the unbelievable speed of 2400 baud), I decided to set it up in the kitchen. After copying some files from my main machine's hard drive onto diskette, I attempted to load the application — a whopping 200 KB program — and received the familiar “out of memory” message.

My son, who had been watching me, somewhat bemused between selecting downloads of rock star JPEGs on his multimedia machine, burst into laughter and advised me to stack the machine out with the rest of the pile by the curb. A little annoyed, I reminded him that my first machine had 4 KB RAM.

I suppose that was the equivalent to the proverbial walking a mile through the snow to get to school, from his perspective, but my first computer really did have 4 KB of memory and was bought rather unceremoniously at a Toys-R-Us. That's right: Toys-R-Us. PCs had evolved past the infamous Altair, but they were still toys for hobbyists.

HOW TIMES CHANGE

I fell in love with OS/2 the day I realized I was downloading a file in one session, uploading messages to an online service in another, backing up my system, while entering data in a Windows spreadsheet. And yes, I've been known to use a Windows app now and then. I'm not one of those purists who believes Bill Gates is the antichrist, and OS/2 the salvation of the world. I simply want the best tool for the job — which is why I prefer OS/2. I do boot up to DOS every now and then: after hours, when I want to play games. But when I want to be productive, I boot to OS/2.

There is a reason why OS/2 is a better operating system for business. Historically, at the time Bill Gates was developing MSDOS and BASIC, PCs were not considered tools

for serious work; they were the domain of hobbyists. It was IBM's entry into the PC market that bequeathed on PCs the aura of respectability necessary for PCs to be considered as potential resources by corporate America. The IBM PC project was nonetheless a bold, experimental venture, which explains why IBM contracted a young Bill Gates and his fledgling Microsoft to supply a disk operating system rather than divert their developers from the more important and profitable mainframe and mini operating systems.

**I'm not one of those
purists who believes
Bill Gates is the
antichrist, and OS/2 the
salvation of the world.
I simply want the best
tool for the job —
which is why
I prefer OS/2.**

IBM has been perfecting the technology of multitasking operating systems for decades. Microsoft, on the other hand, has been catering to the home market — the natural evolution of the hobbyists. Thus, I am appreciative that OS/2 allows me to boot to either, for I am both hobbyist and businessperson; and I am a little bemused over Gerstner's comments last fall that IBM was conceding the desktop market to Microsoft to concentrate on their strength, corporate America. Was that news?

I've been fortunate to be associated with SofTouch Systems, a company that provides both mainframe and PC software. Recently, we were chosen to participate in the beta program for the P/390, a hybrid between the mainframe and microcomputer. My first reaction was that of any inveterate hack: This was the machine, the ultimate PC. What I couldn't do with such a machine! But, that's the point. If IBM had the marketing acumen of Microsoft, they would respond with “Where

do we want to go today?” Watching MVS and VSE run in OS/2 sessions, I couldn't help but think: do that with Win95.

This “tips and tricks” column will cover a number of subjects and techniques over the next several months, beginning with a topic which, due to my association with the GammaTech Utilities, is near and dear to my heart: the HPFS file system. At SofTouch, I have had the fortune of being associated with some of the most brilliant and knowledgeable developers in the OS/2 world. I will introduce you to them in upcoming issues, and allow you to benefit from the many insights they have given me. Like many of you, I have both provided technical support and trained technical support personnel, and have discovered it is as important to understand why things work as how they work. I hope that perspective justifies walking through the snow five miles to school. **ts**

Was this column of value to you? If so, please circle Reader Response Card No. 46.



Michael Norton is the workstation division manager at SofTouch Systems, which provides both mainframe and PC software solutions. He has written mainframe manuals in addition to articles for several publications. You can reach him at mnorton@softouch.com.